

EXHIBIT G



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/105,034	03/21/2002	Steven R. Kleiman	NWK-002	4735
<div style="display: flex; justify-content: space-between;"> <div> <p>7590</p> <p>11/19/2004</p> <p>A. Sidney Johnston Cesari And McKenna LLP 88 Black Falcon Avenue Boston, MA 02210</p> </div> <div> <p>EXAMINER</p> <p>NGUYEN, THAN VINH</p> </div> </div>				
			ART UNIT	PAPER NUMBER
			2187	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER
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20041105

DATE MAILED:

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Commissioner for Patents

Than Nguyen
Examiner
Art Unit: 2187

Office Action Summary	Application No.		Applicant(s)	
	10/105,034		KLEIMAN ET AL.	
	Examiner		Art Unit	
	Than Nguyen		2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 20 August 2004.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 17-38 and 42-83 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 17-38 and 42-83 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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DETAILED ACTION

1. This is a response to the amendment, filed 8/20/04.
2. Claims 17-38,42-83 are pending.

Specification

3. The amended title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Method For Writing Contiguous Arrays of Stripes in a RAID Storage System Using Combined Writes.

Information Disclosure Statement

4. The IDS, filed 5/27/03, reference "DAVID HITZ et al" indicated on the IDS, filed 5/27/03, fails to meet 37 CFR 1.98 (b) (5). This rule states that, each publication listed in an information disclosure statement **must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication.** Therefore, this reference is not considered by the Examiner. Applicant is requested to furnish the information of the reference to meet the requirements of 37 CFR 1.98.

Claim Rejections - 35 USC § 101

5. Claims 47,50,83 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims claim electromagnetic signals propagating on a computer network. These claimed inventions are not statutory subject matter as the claims are not **tangible**.

Response to Arguments

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6. Applicant's argument and amendment, filed 8/20/04, are not persuasive to overcome the previous prior art rejection. Applicant argues that DeKoning does not teach associating the data block with a respective storage block and transmitting the association to the storage device manager. The Examiner disagrees. Each of the data block for storage has an associated destination address. This associated address is sent to the storage device for storing the data. The previous rejection is maintained.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 17-38,42-83 are rejected under 35 U.S.C. 102(b) as being anticipated by DeKoning (US 6,148,368).

9. As to claims 17,33,34,42,45-54,57,64,69,70,72,,80-83:

10. DeKoning teaches a controlling storage of data in a plurality of storage devices each comprising storage blocks comprising: buffering a plurality of write requests associated with data blocks for a single write transaction (7/60-8/13); defining a group of storage blocks, the group comprising a plurality of storage blocks in each of the plurality of storage devices (7/60-67); and associating each data block with a respective one of the storage blocks (each block has an associated destination address for writing/storing to a destination; 7/45-52), for transmitting the association to a storage device manager for

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processing of the single write transaction (combining multiple requests into a single write; 8/4-12).

11. As to claims 18,43,62,63,79,80:

DeKoning teaches receiving by a file system the plurality of write requests, and transmitting from the file system to the storage device manager the association for processing of the single write transaction, wherein the storage device manager comprises a RAID layer (7/55-8/13).

12. As to claim 19:

DeKoning teaches associating each data block of at least one of the write requests with storage blocks of only one of the plurality of storage devices (each request is to a specified storage; 7/15-25).

13. As to claim 20,38:

DeKoning teaches defining the group of storage blocks comprises receiving by the file system from the storage device manager configuration information of the plurality of storage devices. (RAID system configuration; 6/42-60)

14. As to claim 21,61:

DeKoning teaches the configuration information comprises disk topology information (7/45-59).

15. As to claim 22,23,24,65-68,76-78:

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DeKoning teaches the group of storage blocks comprises more than one contiguous stripe in a RAID group (8/4-7, 13/25-32).

16. As to claim 25,26,29,30;

DeKoning teaches the plurality of storage devices comprises more than one RAID group, and defining the group of storage blocks comprises defining the group of storage blocks from storage blocks in a first RAID group (9/22-32, 15-62-15/6).

17. As to claim 27,28:

DeKoning teaches queuing a plurality of associations by the storage device manager for processing of a plurality of write transactions (schedule writes; 9/56-66, 11/6-26)

18. As to claims 31,32:

DeKoning teaches the group of storage blocks comprises allocated and unallocated storage blocks and comprises selecting an unallocated storage block having a lowest block identifier of any unallocated storage block as a storage block having a lowest storage block identifier of any storage block in the group (3/64-4/26).

19. As to claim 35:

DeKoning the RAID layer comprises a second plurality of storage devices that each comprise a plurality of storage blocks that mirror storage blocks of the plurality of storage devices, and further comprising storing the data in a group of storage blocks of the second plurality of storage devices (abstract, 5/39-45).

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20. As to claim 36,44:

DeKoning teaches performing a parity determination for one of the groups of storage blocks prior to storing, and sharing a result of the parity determination with the other of the groups of storage blocks and selecting one of the groups of storage blocks for performing the parity determination (7/25-30, 7/60-8/22).

21. As to claim 55,71:

DeKoning teaches storing the data block in a memory of the storage system (caching data; 7/42-65).

22. As to claim 56,74:

DeKoning teaches creating an array as the association (7/60-8/12).

23. As to claim 58-60,75:

DeKoning teaches buffering the write requests into a single write request until the buffer is a predetermined level/full (buffer requests in cache until full; Fig. 4,5).

24. As to claim 73:

DeKoning teaches one or more storage devices having storage blocks (RAID).

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571)272-4201. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NA0005498

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A handwritten signature in black ink, appearing to read 'Than Nguyen', with a long horizontal flourish extending to the right.

Than Nguyen
Examiner
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NA0005499